



# Dworshak Fisheries Complex

## Monthly Activity Report



November, 2011

U.S. Fish & Wildlife Service, Region 1

Volume 1, Issue 1

### Special points of interest:

- Total Fish/Eggs on station at Dworshak: 4,984,459
- Total Fish/Eggs on station at Kooskia: 1,948,881
- New chiller in Mechanical I gets Chinook egg development back on track.

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### Manager's Message....

Teamwork. Webster's definition is "cooperative effort by the members of a group or team to achieve a common goal." It is a simple word with a short definition but it has massive complexity when applied to this facility. Management of the facility is a unique and sometimes contentious partnership involving the Fish and Wildlife Service, Corps of Engineers, Nez Perce Tribe, Lower Snake River Compensation Plan, Bonneville Power Association and Idaho Department of Fish and Game. The work force is a mixture of 2 separate employers (FWS and NPT) with different personnel rules. There are 3 different work units at the hatchery; hatchery staff, FRO and

FHC. Within the hatchery staff, we have biologists, fish culturists and maintenance staff. Stir up all this complexity and diversity and most people would say we have a recipe for failure. In reality, we have a team that is focused on making fish for the collective use of the citizens of our country. All the fish in the river are visible proof of the excellent teamwork that all staff has exhibited. I applaud all staff for the great job. Pat yourselves on the back. You earned it.

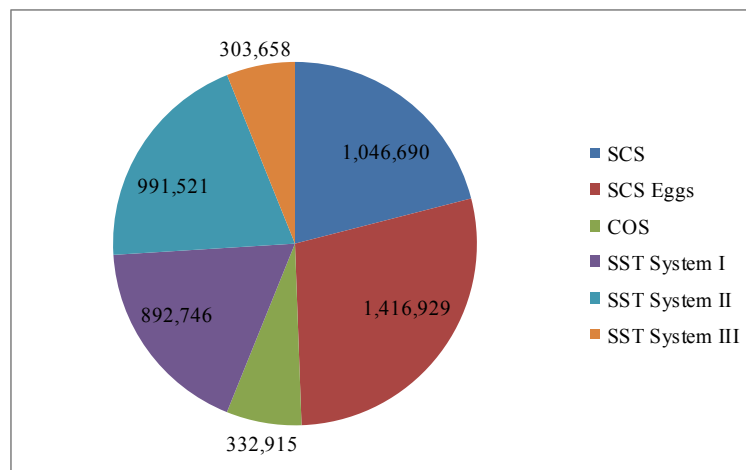
Larry Peltz



Complex Manager Larry Peltz

### Production Summary: *Dworshak National Fish Hatchery*

Figure 1. Total Production—Fish on Station (11/30/11).



Eyed Chinook eggs and newly hatched alevin.



A returning steelhead makes the final leap up the fish ladder

*“Three of the four SCS egg takes had hatched by the end of November.”*



Chris Peery collects length data from an adult Steelhead.

## Hatchery Headlines: *Dworshak Spring Chinook Salmon (SCS)*

### *Brood Year 2010 (BY10)*

At the end of the month there were 1,046,690 BY10 SCS on station averaging 33 fish per pound (fpp) and 119 mm (4.7 inches) total length. Mortality for the month averaged 0.05 percent and water temperature averaged 48.1°F in the raceways (RWs).

### *Brood Year 2011 (BY11)*

Three of the four egg-takes had hatched by the end of the month and there were 1,416,929 BY11 SCS eggs/sac fry in A and B-bank incubators. Mortality for the month averaged 0.5 percent and water temperature averaged 35.9°F.

## Hatchery Headlines: *Dworshak Summer Steelhead (SST)*

### *Brood Year 2011*

At the end of the month there were a total of 2,187,925 SST on station in the BPs averaging 13 fpp and 155 mm (6.1 inches) total length. Mortality was 0.2 percent for the month and temperature averaged 48.5°F in System I (reservoir water blended with river water) and 48.1°F in Systems 2 and 3 (river water).

### *Brood Year 2012*

The ladder was operated at the beginning and middle of the month and 376 adult steelhead were collected to represent the early returning adults of the run. Included are 60 fish for *Infectious Hematopoietic Necrosis Virus* (IHNV) sampling and 158 for tagging and recapture in January of 2012. Fish for IHN sampling were donated to the food bank. Additional fish will be collected in December with the first spawning effort occurring in January.

## Hatchery Headlines: *Dworshak Coho Salmon (COS)*

### *Brood Year 2010*

At the end of the month, there were 332,915 on station in RW's 16-21 averaging 40 fpp and 105 mm (4.1 inches) total length. Mortality for the month averaged 0.08 percent and water temperature averaged 48.1°F.

### **Total Fish on Station: *Dworshak, 11/30/2011***

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS	10	RWs 1-15; 22-30	1,046,690	32,006	33	4.7	119
SCS	11	Incubation Trays	1,416,929	650	Eggs/Fry	Eggs/Fry	Eggs/Fry
COS	10	RWs 16-21	332,915	8,270	40.3	4.1	105
SST	11	System I	892,746	46,452	19.2	5.3	135
SST	11	System II	991,521	94,790	10.5	6.5	165
SST	11	System III	303,658	32,089	9.5	6.7	170
SST	11	SST on feed Tot/Ave	2,187,925	173,331	12.6	6.1	155
<b>Total Fish/Eggs on Station EOM</b>			<b>4,984,459</b>	<b>214,257</b>			

## Hatchery Headlines: *Kooskia*

### *Kooskia Coho Adult Trap Operations Brood Year 2011*

Total Coho trapped at the KNFH in November was 336. There were no adults transported from the Lapwai weir to KNFH during the month. The Coho program had separated out Coho from the steelhead trapped at DNFH and transported Coho adults to KNFH. A breakdown of the trapping can be seen in the table on page 4. Adult females were being held in raceways 12 and 10 and males were in raceways 11 and 9.

### *Kooskia Coho Spawning Brood Year 2011*

Coho spawning egg takes 2, 3 and 4 were performed on November 1, 8, and 15. There were 341 females spawned during the month. Using an average fecundity of 2,900 988,900 eggs were produced. Eggs from five females were discarded because they were green or overripe. Egg and milt collected on takes 2 and 3 were transported separately

to DNFH. Eggs were fertilized, placed in heath trays and then sterilized. These eggs will be enumerated and incubated to eye-up at DNFH and then transported to Eagle Creek Hatchery for final rearing for release in 2013. Take one Coho eggs at KNFH were evaluated the first of November and it was determined several trays were of poor quality and a few more eggs may be needed. Egg take four was kept at KNFH for incubation and enumeration. Take four consists of eggs from 33 females, using the average fecundity we put up 95,700 eggs. A total of 591,600 Coho eggs were on station at the end of the month.

### *Kooskia Chinook Brood Year 2010*

Fish on station the end of the month were 627,805 fry with an average size of 29.3 fpp at 4.84 inches (123 mm) length. Total feed consumed for the month was 2,213 lbs. Mortalities for the month totaled 421. Monthly Pathology evaluation shows an increase in body fat

but they would like to see more body fat going into the winter. Clear Creek temperatures have dropped 46° F for a high and the low during the month was 32° F. With the decrease in water temperature, the amount of fish feed being fed has decreased.

### *Kooskia Chinook Brood Year 2011*

The egg incubation chiller operated without problems the whole month at temperatures between 38 to 41°F. Egg takes two and three hatched the end of the month and egg take four will hatch the first part of December.



Aerial view of Kooskia NFH



## KNFH 2011 SCS Egg Data

Take	Total eggs	Eyed eggs	Bad eggs	Picked after hatch	Percent hatched
2	186,246	172,353	11,525	2,368	92.5%
3	406,163	379,681	22,230	4,252	93.4%
4	172,137	165,448	6,689		
Total	764,546	729,476	35,070	6,620	92.95%

**Adult Coho at KNFH, November 2011**

	Transported to KNFH		Spawned		Mortalities		On Station	
	M	F	M	F	M	F	M	F
KNFH	150	186	143	174	23	78	0	0
LW	0	0	0	0	0	0	0	0
DNFH	0	0					0	0
Total at KNFH	150	186	143	174	23	78	0	0



**A diver from Siemens dons gear to make repairs to rotating screen # 3.**

***“The new boiler controls in Mechanical II will provide more consistent temperature control in the Nursery.”***



**HIC students get instructions prior to releasing their fish.**

**Information and Education Corner***Dworshak*

Stats: Tours-0; Register– 65 people from 7 states; Website visitors– N/A; Total Contacts– 13.

*On Site:*

November was an exciting month for I&E! A new Dworshak Fisheries Complex Blog was created: [The Fish Ladder: Notes from Dworshak Fisheries Complex](#). Please visit the site and feel free to contribute!

I was fortunate to work with two local educators to expand the HIC program. Erica Allen from the Northwest Children’s Home in Lewiston is receiving a grant to set up a program there. Aron Jackson, TESLA Science Resource Teacher, will expand his existing HIC program from McSorly elementary school to 4 Lewiston Schools and 4 regional schools. This exciting new program will be a collaborative effort between FWS, IDFG, NPT, and COE and will not only provide elementary students with the HIC curriculum, but will assign each classroom a biologist mentor who will visit the class several times throughout the program and be available to answer student questions through the HIC project blog.

Additional I&E activities for November were: updating the website, completing a station fact sheet, and reformatting the MAR.

*Kooskia*

Hatchery personnel are trying to keep count of visitors to the grounds. There were approximately 50 visitors for the month by the manual count.

## Maintenance Activities

### *Dworshak*

This month Metal Benders mobilized to the Mechanical II building to begin installation of the new boiler controls. This project will continue through December. This project will enhance the safety of the boilers and provide for more consistent temperature control in the Nursery system. In the coming months we will be looking at replacing the old pneumatic transducers with new electromagnetic valve positioners and digital controllers to control the heat exchanger valves and supply sump valves. These changes will increase the accuracy and reliability of those systems.

This month also saw completion of repairs on rotating screen #3. The foot cog and bushings on rotating screen #3 in the main pump house had worn to the point that failure was imminent. A dive team from Siemens industrial performed the repairs underwater, getting the job done in less than three days, once the parts arrived.

Other activities included:

- Installed new formalin drip system plumbing in incubation.
- Repaired Spawning and incubation room area heaters.
- Installed new flow meter in Mech II nursery supply line.
- Installed new heater in maintenance shop bathroom.
- Repaired area lighting at housing area and visitor lot.
- Installed flow meter in Sys III effluent line.
- Replaced lift cables on small channel crowders.
- Installed UHMW leading edge on front small crowder fish basket.
- Rebuilt net and broom handles.
- Fabricated wrenches for main pump castle nut adjustment.
- PM Service performed on Mechanical I air compressors.
- PM Service performed on main pumps.
- New steering tires installed on the Hyster Forklift.
- Replaced Nursery C bank water supply butterfly valve.
- New tires installed on the Chevy Trailblazer and the 1999 Dodge Caravan.
- Replaced sump pump in pipe vault.

### *Kooskia*

- Nov 01: Spawned Coho and eggs are incubating at KNFH. Spawned Coho and the eggs and milt were transported to DNFH for fertilization and incubation.
- Nov 02: Evaluated and moved adult Coho from the trap to the raceways.
- Nov 08: Fire extinguishers were inspected and the well levels documented. Spawned Coho and the eggs and milt were transported to DNFH for fertilization and incubation.
- Nov 09: Installed UV cabinets over the external UV filter systems at two hatchery residences.
- Nov 15: RMIS data was sent to the Regional office and Spawned Coho eggs were fertilized and will be incubated at KNFH.
- Nov 17: The biannual water sampling was done for the hatchery and transported to Moscow for evaluation.
- Nov 21: Out-planted adult Coho from KNFH.
- Nov 22: Installed more efficient light fixtures in the wood shop. Gerry balanced the Freon charge in the incubation chiller to decrease the buildup of external ice on the unit.
- Nov 28: Pumped sand out of Burrows ponds 4, 5, and 6. This was building up because of being on Clear Creek water.
- Nov 30: Installed pipe from the irrigation pump to adult evaluation site so the pump can be used to fill trucks for fish transport.





**System I Burrow's ponds.**



**Rob Bohn with a PIT tagged steelhead.**



**Treating steelhead for Trichodina**

## Meetings....Training....Travel

### *Dworshak*

- 11/1 The monthly Snake River Basin Adjudication coordination meeting was held at the Nez Perce Tribal Fisheries Office in Lapwai. Larry Peltz, Mark Drobish, Nate Wiese attended the meeting along with Becky Johnson, Ed Larson, Kent Hills and Bruce McLeod of the Nez Perce Tribal Fisheries.
- 11/28 Larry Peltz, Complex Manager, Mark Drobish, Hatchery Manager, and Adam Izbicki, Maintenance Supervisor participated in a conference call with the COE Rehab Team.
- 11/28-12/1 Penny Hasenoehrl attended FBMS PRISM training in Portland, OR.

### *Kooskia*

- Nov 16 Meeting in Lewiston with the fabrication department at Gateway Inc. on the timeline for installing the inside incubation return manifold.
- Nov 28 Conference call with Marv from the Regional office, Chuck from Brockway Engineering and DNFH on the domestic well improvement plans.

## Administrative Activities

### Safety

There were no safety actions to report in November.

### Personnel Actions –

There were no personnel actions to report in November.

## Staff Service Anniversaries and Birthdays

### *Years of Service*

There were no years of service anniversaries reported for the month of November.

### *November Birthdays*

Mike Faler  
Frank Mullins  
Clarice Holt



## Idaho Fish Health Center

### Complex Hatcheries

**Kooskia:** Guppy visited on 11/29 for monthly monitoring and took samples for BKD monitoring by ELISA.

**Dworshak:** Steelhead in System II and III were examined on 11/7 and 11/14 and treated for Trichodina. System II and III were rechecked after treatment was done on 11/16 and found to be clear. SCS were examined on 11/22. Formalin treatment was recommended for external parasites and kidneys were sampled for BKD monitoring by ELISA. SCS were given a formalin treatment on 11/23.

STT adults returns from the river were sampled for IHNV on 11/3 and 11/17.

**NEZ PERCE TRIBE:** Coho spawning is completed for this year. Fish health staff took samples at all spawning dates including 11/1, 11/8 and 11/15.

**Bacteriology:** No reportable pathogens for this month to report.

**Virology:** Corie ran 442 new samples for virus and also ran 233 blind passes.

### Other:

Laura followed up with Matthew Patterson from NCTC both on future fish health training needs and with future training we could provide to help out NCTC. Ideas for how to help AFS with training modules for future certifications were also discussed. Laura started preparing a short Webinar about fish health centers and what they do. It will be available in the future as an online video course offered through NCTC.

11/2 Guppy participated in conference call with APHIS regarding new import regulations from Canada.

11/2 Guppy participated in conference call with APHIS epidemiologist and Olympia FHC regarding ISAV.

11/2 Guppy attended Dworshak HET meeting concerning SCS proposal.

11/3 Corie, Jack and Guppy participated in conference call to address TDG issues at Hagerman NFH.

11/7 Guppy and Laura attended all fish health center conference call.

11/7 Guppy participated in conference call for all USFWS Veterinary Medical Officers.

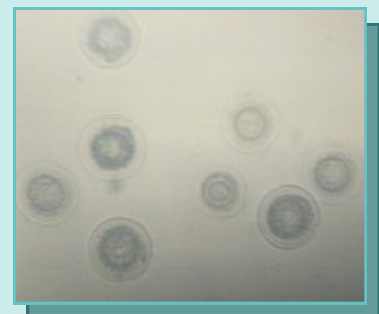
11/14 Guppy and Laura gave input to conference call/interview with Paul Heimowitz concerning ANS.

11/14 Guppy participated in RO project leader conference call.

11/16 Guppy participated in Dworshak SCS M & E plan meeting.

11/21 IFHC staff sent 120 suspect IHNV samples to Maureen Purcell at USGS Western Fisheries Science Center to help with the validation of new QPCR protocols for IHNV.

11/28 IFHC Station Fact Sheet completed, Laura helped Guppy with this request.



**Trichodina, or Tric is an external parasite that infected steelhead and Chinook during November.**

## Staff List

### Complex Management

Larry Peltz, Complex Manager  
Ed Larson, Nez Perce Tribe Co-Manager  
Mark Drobish, Hatchery Manager  
Nathan Wiese, Assistant Hatchery Manager  
Jack Christiansen, Aquatic Engineer

### Dworshak Production Staff

Thomas Trock, Mark Bright, Angela Feldmann, Jill Olson, John Vargas, Rick Allain, Rob Bohn, Wayne Hamilton, Ben Wright, Clarice Holt

### Nez Perce Tribe Production Program

Mike Bisbee, Tuianna Moliga, Lou Ann Lasswell, Steve Coomer, AJ Sisto, Paul Eneas

### Administration

Joan George, Penny Hasenoehrl

### Maintenance

Adam Izbicki, Ben Greene, Terry Weeks, Dave Trainor, Rick King, Brent Goosen, Rob Kellar, Gerald "Scooter" Stretsbery

### Idaho Fish Health Center

Dr. Marilyn Blair, Liz Steiner, Laura Sprague, Corie Samson

### Idaho Fishery Resource Office

Howard Burge, Mike Faler, Dr. William Conner, Ray Jones, Aaron Garcia, Carrie Bretz, Frank Mullins, Tom Biladeau, Dr. Chris Peery, Jody Brostrom, Randy Bowen, Steve Bradbury

### Kooskia National Fish Hatchery

Kent Hills, Art Broncheau, Kenny Simpson, Gerry Fogelman



**Nez Perce Tribe and Dworshak NFH Production, Maintenance, and Administrative staff.**

### Team Member of the Month: Brent Goosen

Brent Goosen- our new maintenance worker began his position at Dworshak last August. Brent is originally from Kirkston, Minnesota. Brent moved to Orofino from Fargo, ND and previously spent ten years in the United States Marine Corps where he served as a Mechanic and a Primary Marksmanship Instructor. Outside of work Brent enjoys hunting, fishing, hockey, auto restoration, and "anything to do with the outdoors".

As soon as Brent arrived at Dworshak he hit the ground running. He has played an integral role in several major projects at the Hatchery. When asked what he likes most about his job Brent replied, "I like the management here. My co-workers are happy and good people to work with."

Brent's energy, good humor and positive work ethic have been noticed by everyone. We are glad to welcome Brent to the Dworshak Team!



**Brent joined the USFWS team August, 2011.**